Title (en)

Device for aligning a stack of sheets arranged one above the other

Title (de)

Vorrichtung zur Ausrichtung von in einer Lage übereinander angeordneten Bogen

Title (fr)

Dispositif d'alignement de feuilles empilées

Publication

EP 1607356 A3 20060104 (DE)

Application

EP 05016260 A 20020719

Priority

- EP 02764521 A 20020719
- DE 10139218 A 20010809

Abstract (en)

[origin: WO03016188A2] The invention relates to a device and a method for aligning at least the front edge of several sheets arranged in a stack, one above the other, whilst maintaining the order of the sheets. Said device comprises a stacking table, one side of which is provided with a front edge stop for aligning the front edge of the sheets. A supporting platform, upon which a stack of sheets can be placed with non-aligned front edges, is arranged upstream of the stacking table. The device is provided with a sheet feeder, which removes the sheets from the supporting platform by placing them in an overlapping stream with the front edges placed under the preceding sheets. A turning device is provided downstream of the sheet feeder, said device turning the overlapping stream in such a way that the front edge area of each sheet is freely accessible. Downstream of the turning device, the invention is provided with a conveyer device, by means of which the sheets are conveyed, forming a new stack, to the front edge stop of the stacking table, where their front edges can be aligned.

IPC 8 full level

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Citation (search report)

- [A] EP 0403886 A1 19901227 - FERAG AG [CH]
- [A] DE 2348320 A1 19750327 - VITS MASCHINENBAU GMBH
- [A] US 4380332 A 19830419 - DAVIS DWIGHT M
- [DA] EP 0173959 A1 19860312 - MITSUBISHI HEAVY IND LTD [JP]
- [A] DE 4231891 A1 19940324 - STEINEMANN ULRICH AG [CH]
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 208 (M - 1401) 23 April 1993 (1993-04-23)

Cited by

DE102012216519A1; DE102012216519B4

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